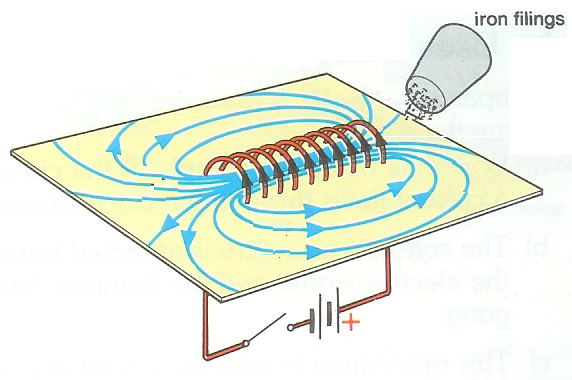
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|  | **Physics** | **شعار-القسم** |
| **Worksheet-4-** |
| Electromagnet |

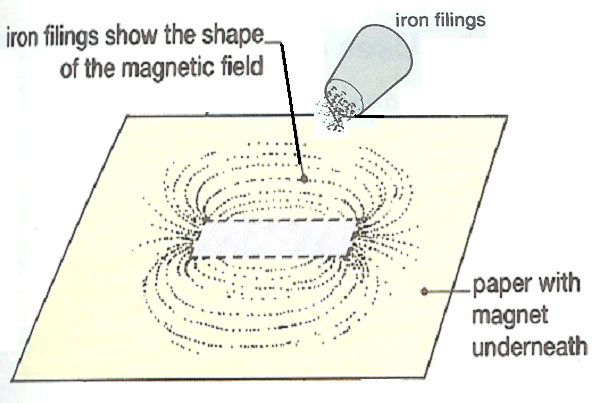
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| Name: Class: 8 /……........ | |
| Book pages: | |
| **22-1-2012** | Date: |
| **18.19.1-8.19.2** | Core Standard number |
| 1. Know that a coil of wire carrying a current produces a magnetic field similar to a bar magnet 2. Know how an electromagnet works and list the factors that affects its strength. 3. Explain the uses of electromagnet | Learning Objectives  Logo + text 2 |

1. Which of the following pictures show the magnetic field lines of a bar magnet, and which show

the magnetic field lines of a solenoid coil?

a-…………………………….. b- ……………………………….

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1. Compare the magnetic fields above.

……………………………………………………………………………………………………………..

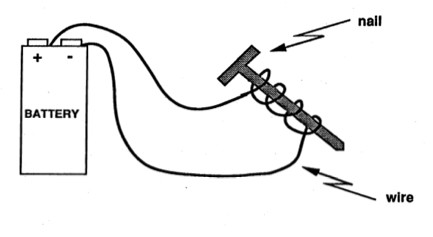
……………………………………………………………………………………………………………..

1. Conclusion:………………………………………………………………………………………………

…………………………………………………………………………………………………………….

1. a- An insulator copper wire is wrapped around a nail , the ends of the wire touch to the

battery as shown in the figure below.

 Switch on the battery and try to pick up paper clips with the end of the nail………………………………….

Switch off the battery and try to pick up paper clips with the end of the nail………………………………….

1. What is called the apparatus set up above? Define it

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. List the factors that affect the strength of the electromagnet.

* ……………………………………………………………………………………………………………
* ……………………………………………………………………………………………………………
* ……………………………………………………………………………………………………………

1. a- List everyday uses of an electromagnet:

-……………………………………………………………………………………………………………..

- …………………………………………………………………………………………………………….

-……………………………………………………………………………………………………………..

b- Explain the function of the electromagnet in each example:

-………………………………………………………………………………………………………………

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